

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph on page 1, line 3, line 4, between REFERENCE TO RELATED APPLICATION and BACKGROUND OF THE INVENTION as follows:

This is a Divisional Application of prior U.S. Patent Application Serial No. 09/897,918, filed July 5, 2001, now U.S. Patent No. 6,609,950, issued August 26, 2003.

Please amend paragraph [0005] as follows:

In the light of the above, the present invention aims to provide a polishing apparatus ~~and a method~~ which ~~enables~~ enable layers of a substrate to be polished with a single turntable having a small diameter while conducting a real-time thickness measurement of the layers which are being subjected to polishing, thereby solving the problems involved in the prior art such as low throughput, complexity and size of the polishing apparatus.

Please amend paragraph [0006] as follows:

In accordance with the present invention, ~~there is provided~~ a method of polishing a substrate comprises ~~comprising~~: bringing a surface of a substrate to be polished into contact with a polishing surface of a polishing table in such a manner that a portion of the surface of the substrate extends outwardly from an outer periphery of the polishing surface; rotating the substrate about its center axis while keeping the surface of the substrate in contact with the polishing surface of the polishing table; and controlling an attitude of the substrate which is being rotated.

Please amend paragraph [0008] as follows:

The method may furthermore comprise ~~comprises~~ supplying a polishing liquid between the surface of the substrate and the polishing surface of the polishing table, wherein substrate polishing conditions are changed in response to the progress of the polishing of the surface of the substrate by changing a force for urging the surface of the substrate against the polishing surface, a number of revolutions per minute of the substrate, a number of revolutions per minute of the polishing table and/or a kind of the polishing liquid. It is preferable that when the polishing liquid is changed from

a certain kind of polishing liquid to another kind of polishing liquid, the polishing surface of the polishing table is subjected to a cleaning operation to remove residue of the polishing liquid used in the preceding steps of the polishing of the surface of the substrate to avoid the production of an undesired compound.

Please amend paragraph [0042] as follows:

The carrier support arm 10-3 is adapted to be moved up and down by an actuator 10-9 which is controlled by the controller 20, whereby a wafer carried by the substrate carrier can be engaged with the polishing surface 10-1a under a desired pressure. The substrate carrier 10-2 is positioned over the turntable 10-1 in such a manner that a portion of a lower surface of the substrate carrier 10-2 extends radially outwardly from an outer periphery of the polishing surface 10-1a of the turntable 10-1. Further, an attitude of the substrate carrier 10-2 is controlled by an attitude controller which will be explained later, so that the lower surface of the same holding the substrate W is kept parallel with the polishing surface 10-1a of the turntable 10-1, whereby a contact pressure between the surface of the substrate W and the polishing surface can be made uniform across the entire area of the surface of the substrate. To readily effect attitude control, the center of the substrate W is positioned over the polishing surface 10-1a of the turntable 10-1. Furthermore, to attain a high polishing rate, the substrate W is spaced away from the center of the polishing surface 10-1a.

Please amend paragraph [0052] as follows:

As shown in Fig. 6, each of the pole members 63a-63d has radially outwardly extending upper and lower portions and is provided on its lower portion with the electromagnetic coils 64a-64d ~~641-64d~~. The pole members 63a-63d and the cylindrical armature 65 are made from a magnetic material such as a permalloy. As shown in Fig. 5, the electromagnetic coils 64a-64d are positioned at equidistant positions on an X-axis and a Y-axis relative to an origin of an X-Y coordinate shown in Fig. 5, which origin coincides with the center of the electromagnetic core 63. There are provided four pairs of positional displacement sensors 66a₁-66a₂, 66b₁-66b₂, 66c₁-66c₂, and 66d₁-66d₂, which are symmetrically placed in equidistant positions on axes P and Q and which make an angle of 45

degrees relative to the X-axis and Y-axis. Each of the positional displacement sensors is held by a sensor holder 67.

Please amend paragraph [0064] as follows:

Fig. 10 shows another embodiment of the present invention, in which a water jet dressing device 10-13 is used to clean the polishing surface of the turntable 10-1. The dressing device includes a plurality (six in the embodiment) of equally spaced water jet nozzles 10-13c provided above the polishing surface 10-1a and along a radius of the polishing surface. The water jet nozzles 10-13c are fixed on an arm 10-13a formed with water supply ~~passage~~ passages 10-13b therein. The water supply passage 10-13b is supplied with pure water through a pipe 22 to direct pure water jets towards the polishing surface through the water jet nozzles 10-13c. The pressure of the pure water supplied to the water jet nozzles 10-13c is controlled by pressure control (not shown) of a pump 23. All the water jet nozzles have the same dimensions so that flow rates and pressures of the pure water jets can be made substantially equal. It is preferable to adjust the pressure of the pure water jets to be in a range of 5 - 30 Kg/cm².